SEPA

United States Environmental Protection Agency Washington, DC 20460

Notice of Arrival of Pesticides and Devices

Send Completed Form to Appropriate Regional Office Listed in the Instructions for this Form. OMB Control No. 2070-0020 Approval Expires 11/30/2016

Pesticides and Devices Note: Read Instructions before completing form. Part I: To Be Completed by Importer of Record or Licensed Customs Broker 1. Name and Complete Address of Licensed Customs Broker 2. Name and Complete Address of Importer of Record Nufarm Americas Inc. Expeditors International Attn: Brynn Wisz 11901 South Austin Avenue 849 Thomas Drive Alsip, IL 60803 T:708-377-1330 T:630-616-2318 Bensenville, IL 60106 Return Form to this Address Return Form to this Address 4. EPA Registration Number 5. EPA Producer Establishment No. 3. Name and Complete Address of Shipper 83807-CHN-001 35935-46 Sichuan Leshan Fuhua Tongda Agro Chemical 6. Brand Name of Product Tech Co. Ltd. GLYPHOSATE ACID TECHNICAL Qiaogou Road Wutoniqiao District Leshan City, Sichuan, China 614800 7. Active Ingredients and Percentage of Each -(phosphonomethyl)glycine 95% 8. Unit Size 10. Total Net Weight 11. Country of Origin 9. Quantity 1.000 KG 360 360,000 Kgs China 12. Port of Entry 13. Name and Complete Address of Carrier Chicago, Illinois Hanjin Paris 15. Anticipated Entry Date 14. Entry Number 231-6199554-7 1/13/14 16. Lassert that information constituting Confidential Business 17. Location of Goods for Examination after Importation Information is shown in the above blocks numbered: (Note: Blocks 4, 5, 6, 7 are not entitled to CBI treatment-see instructions) Chicago, IL 18. To be Completed for Pesticides without an EPA Registration Number (The following information is optional, but may expedite processing of the Notice of Arrival. Check all that apply and provide additional information as indicated) ☐ 18a. A pesticide transferred between registered establishments operated by the same producer. Domestic Producer Establishment Number: 18b. A pesticide transferred between registered establishments not operated by the same producer. Domestic Producer Establishment Number EPA Registration Number of Product being Formulated, if applicable: ☐ 18c. A pesticide distributed under an Experimental Use Permit, Experimental Use Permit Number: ☐ 18d. A pesticide distributed for research and development purposes without an Experimental Use Permit. ☐ 18e. A pesticide transferred solely for export. Domestic Producer Establishment Number: ☐ 18f. A pesticide distributed under an emergency exemption. Emergency Exemption Number: ☐ 18g. A pesticide transferred for the purposes of disposal. 18h. Other. Provide an explanation including the intended use and a description of why the product is being imported into the United States in the Remarks (block 19).

19. Remarks (Provide additional information her	re. It is recommended that a o	copy of the lab	el affixed to the product be	submitted with the NOA.).					
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	Certifi	cation	o true contrate and some	liete I acknowledge that any					
i certify that the statements I have made knowingly false or misleading statement	may be punishable by fine or	· imprisonmen	t of both under applicable	ew					
20. Printed Name of Importer of Record or	Telephone Number	21. Signatur	re of mporter of Record or	Licensed Date Signed					
Licensed Customs Broker	708-377-1363	Customs BR	SwanWink	4 117/14					
Susan Wright	. 00 017 7000	×	Jusui (Vin	4 1 1////					
Part II: To Be Completed by U.S. Environmental Protection Agency									
Action to be taken by U.S. Customs and Border	Protection								
Release Shipment	Detain for Inspection		Release shipment to cons be held intact pending insp	ignee under bond. Shipment must pection.					
Other (Specify)				And the second s					
Remarks									
ENTRY NO. 231-610	79554-7								
Signature and Title of EPA Official			S	Date					
a de la	~ DAM	MM	- Man	11114					
Part III: T	o Be Completed by U.S	. Customs	and Border Protection	on ,					
The information shown in Part I was co was handled as instructed by EPA in P should also be noted in "Remarks."	ompared with the entry papers Part II. Any deviations should	for this shipn be brought to	nent and no discrepancies the attention of EPA before	were noted. The shipment e releasing shipment and					
Remarks									
Signature of District Director of Customs				Date					
Paperwork Reduction Act Notice: The es	timated average time to re	ead the instru	uctions and complete thi	is form is 26 minutes. Send					
comments regarding the burden estimate	or any other aspect of this	s collection of	of information to: Direct	tor, Collection Strategies					
Division, Office of Environmental Inform Avenue, NW, Washington, DC 20460. Ir	nation (OE1), U.S. Enviro iclude OMB number 2070	nmentai Pro 1-0020 in an	tection Agency (Man Co y correspondence.	odo 2022), 1200 i emisyivania					
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GLYPHOSATE FOR MANUFACTURING USE ONLY THCHNICAL

EPA Reg. No. 35935-46	N-(phosphonomethyl)glycine OTHER INGREDIENTS:	ACTIVE INGREDIES :
EPA Est. No. 83807-CHN-001	N-(phosphonomethyl)glycine	

KEEP OUT OF REACH OF CHILDREN DANGER

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)
SEE BELOW FOR FIRST AID AND ADDITIONAL PRECAUTIONARY
STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840

HAZARDS TO HUMANS AND DOMESTIC ANIMALS PRECAUTIONARY STATEMENTS

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. HARMFULT! INHALED. Do not get in eyes or on clothing. Avoid breathing dust. Wear goggles or face shield. Wash throroughly with soap and water after handling and before eating, drinking, chewing guin, or using lobacco. Remove contaminated clothing and wash before reuse.

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Have the product of							IF INHALED						IF SWALLOWED					IF IN EYES	
onta		 	•	_			•			•	•	-							
Have the product container or label with you when calling a polson container or	HOT LINE NUMBER	advice.	Call a poison control center or dector for further treatment	possible.	give artificial respiration, preferably by mouth-to-mouth, if	If person is not breathing, call 911 or an ambulance, then	Move person to tresh air.	Do not give anything by mouth to an unconscious person.	control center or doctor.	Do not Induce vomiting unless told to do so by the poison	Have person sip a glass of water if able to swallow.	treatment advice.	Call a poison control center or doctor immediately for	Call a poison control center or doctor for treatment advice.	then continue rinsing eye.	Remove contact lenses, if present, after the first 5 minutes,	to 20 minutes.	Hold eye open and rinse slowly and gently with water for 15	FIRST AID

boctor, or going for treatment.
You may also contact 1-877-325-1840 for emergency medical treatment information.
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage.

ENVIRONMENTAL HAZARDS

Do not discharge effluent containing this product into takes, streams, ponds estuaries, oceans, or other waters unless this product is specifically identified and addressed in an National Pollutant Discharge Elimination System (NPDES) permit. Do not discharge effluent containing this product into severe systems without previously notifying the severe treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARDS Solutions of this product should be mixed and stored using only stainless steel. aluminum, fiberglass, plastic and plastic-lined containers.

DO NOT MIX, STORE OR UTILIZE THIS PRODUCT OR SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS

containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, accusing serious personal injury, it tignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product.

acerola; aloe vera; ambarella, asparagus; atemoya; ococato bamboo; banana; belefirult; biriba; biriba; biriba; belanti, buribal gourd; cacca (cocca) bean; cactus; canistel; canola, carambola (starfruit); chaya; cherimoya; coconut; coffee; corn; cotton; cramber; carambe (cated apple; dates; cotudant); durian; epazole; felipa; figs; flax; galangai; globe artichoke; Governor's plum; gow kee; grapes; (raisin, table, wine); guavqa; hops; ilmarartichoke; Governor's plum; gow kee; grapes; (raisin, table, wine); guavqa; hops; silmarartichoke; Governor's plum; gow kee; grapes; (raisin, table, wine); guavqa; post; ilmarartichoke; Governor's plum; gow kee; grapes; (raisin, table, wine); guavqa; post; mangosteen; leucaena; lingoportery; longen; lychee; maney apple; mango; mangosteen; mulbarny; okra; dilve; oregano; palm; papaya; passiomfult; passue; grasses; pawpaw; papaya; passiomfult; passue; casana; leaf concernation racille; cararitements. peanut pepper leaf, peppermint perila; persimmon, pine nut pineapple; pistachto, plantain, pomegranate, pulasam, quinoa; rambutlan; rape; rosa apple; safflower; salah; plantain; pomegranate, pulasam, quinoa; rambutlan; rape; rosa apple; safflower; salah; sapodila; sapode (black, mamay, white); sesame; sorghum (milot); soursop; soypean; Spanish lime; speamint; star apple; stevia; stawberry; sugar apple; sugarbeet, sugarcane; sunflower; Surinam charry; tamarind; tea; teff; ti; ugli fruit; wasabi; water sugarcane; sunflower; Surinam charry; tamarind; tea; teff; ti; ugli fruit; wasabi; water Use only for the manufacturing or formulating of, or repackaging as, an herbicide for use in the following crops: Crop Groups 1, 2.3,4,5,6,7,8,9,10,11,12,13,14,16,16,17,18,19,20; spinach; watercress; wax jambu; yacon.

For use in the following glyphosate-tolerant crops: Roundup Ready Affaifa; Roundup Ready Canola (Spring Varieties); Roundup Ready Canola (Winter Varieties); Roundup Ready Corn; Roundup Ready Corn ; Field Corn Hybrids with Roundup Ready 2 Technology; Roundup Ready Cotton; Roundup Ready Electrology; Roundup Ready Cotton; Roundup Ready Supparant, Roundup Ready 2 Yield Soybean; Roundup Ready Supparant Roundup Ready 2 Yield Soybean; Roundup Ready Supparant Roundup Ready 2 Yield Soybean; Roundup Ready Supparant Roundup Ready 2 Yield Soybean; Roundup Ready 3 Yield Soybean; Roundup Ready 3 Yield Soybean; Roundup Ready 5 Ready Sweet Corn; Sweet Corn Hybrids with Roundup Ready 2 Technology.

For the following uses: bernuldagrass releaser, broadcast and spot weed control, for the following uses: bernuldagrass releaser, broadcast and spot weed control, chemical mowing; cut stump application; hollow stem injection; nickloton and fifti; trin-and-edge; furfigrass renovation; site preparation; and other uses in, on or around the and-edge; furfigrass renovation; alleys, lanes, trails & access roads; apartment following sites; and sites; around commercial or industrial structures or outbuildings; complexes; aquatio sites; around commercial or industrial structures or outbuildings; committed and and another industrial structures or outbuildings; committed and another industrial sites; commercial sites; commercial sites; construction sites; CRP land, dirth banks; domant turgrass; driven theaters; driveways construction sites; CRP land, dirth banks; domant turgrass; driven theaters; driveways; constructural areas; prayers; habitat restoration & management areas; firebreaks; forestry, goff & ramps; driven years; prayers; areas; woody brush and trees; and other related sites.

This product may be used to formulate products for any additional uses not listed on this label if the formulator, user group, or grower has complied with U.S. EPA data submission requirements regarding the support of such use(s).

This product may be formulated for products to be used for experimental purposes that are in compliance with FIFRA.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal PESTICIDE STORAGE. Keep container closed to prevent splits and contamination. PESTICIDE SIPOSAL: Wastes of this product may cause irreversible eye damage and pay be dangerous. Improper disposal or excess pesticide or finsate is a violation of may be dangerous. Improper disposal or excess pesticide or finsate is a violation of reclears law. If these wastes cannot be disposed of by use according to the label instructions, connact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING AND DISPOSAL: (This product is available in multiple containers. Follow the container disposal instructions below that apply to your container

Nonrefillable Containers Without Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to toosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning.

Nonrefillable Containers With Outer Bag: Nonrefillable container. Do not reuse or refil this container. Completely empty liner by shaking and tapping sides and bottom to lossen clinging particles. Empty residue into processing equipment, then dispose of liner in a clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary andfill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke. Offer the outer bag for recycling, if available.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELUVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER FURNISHED TO MERCHANTATIONS AND SELLER MAKE NO WARRANTIES, SUARANTIES, OR REPRESENTATIONS OR THERWISE, WITH REGARD TO THE USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE USAGE. UNIVIENDED CONSEQUENCES, FOR ANY PARTICULAR TRADE USAGE. UNIVIENDED CONSEQUENCES, FOR ANY PARTICULAR THE RESENCE OR ASSECUE OF OTHER MATERIALS USED SUCH FACTORS AT THE PRESENCE OR ASSECUE OF OTHER MATERIALS USED SUCH FACTORS AT THE PRESENCE OR ASSECUE OF OTHER MATERIALS USED SUCH FACTORS OR SELLER MAD ASSUMED BY SUVER OR USER. THIS WRITING MANUFACTURER OR SELLER AND NO PERSON OR AGENT OF BUYER, AND NO PERSON OR AGENT OR BUYER. THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL OR MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF CONSISTENT WITH APPLICATION, PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, PENALTIES RELATING TO SELLER SHALL NOT BE LUABLE TO BLYER OR USER, IF BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF DEMANDS ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS ON DEMANDS FOR MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR NISTRICTIONS FOR MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR NISTRICTIONS FOR MISUSE, OR THE BOYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BLYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S DUILS TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BLYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of the directions for use, the warranty discilaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV091713)

MADE IN CHINA

NET WEIGHT: 2204.6 LB (1000 KG)

Morrisville, NC 27560 4020 Aerial Center Parkway, NUFARM LIMITED Manufactured For





For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300. For Medical Emergencies Only, Call 1-877-325-1840.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:

Glyphosate Technical NUP-07163

Synonyms:

Glyphosate; N-(phosphonomethyl) glycine

EPA Reg. No.:

35935-46

Company Name:

Nufarm Limited

4020 Aerial Center Parkway

Morrsiville, NC 27560

Date of Issue:

December 11, 2013

Supersedes: October 21, 2011

Sections Revised:

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance and Odor: White solid with slight odor.

Keep out of reach of children. DANGER. CORROSIVE. CAUSES Warning Statements: IRREVERSIBLE EYE DAMAGE. HARMFUL IF INHALED. Do not get in eyes or on clothing. Avoid breathing dust. Wear goggles or face shield. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

Potential Health Effects:

Likely Routes of Exposure: Eye and skin contact.

Eye Contact: Causes substantial but temporary eye injury. Skin Contact: Slightly toxic based on toxicity studies.

Ingestion: Slightly toxic based on toxicity studies. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed.

Inhalation: Low inhalation toxicity. Inhalation of dusts may cause coughing and sneezing.

Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects: Available data on similar formulations suggest that this product would be slightly to moderately toxic to aquatic organisms and practically non-toxic to avian species, honeybees and earthworms.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Page 1 of 6

COMPONENT N-(phosphonomethyl) glycine Other Ingredients

CAS NO.

% BY WEIGHT

1071-83-6

95.0

5.0

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If on Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable

Autoignition Temperature: Not applicable

Flammability Limits: Not applicable

Extinguishing Media: In case of fire, use water (flood with water), dry chemical, carbon dioxide, or alcohol foam.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later. This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as oxides of carbon, nitrogen, and phosphorous.

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 2 Flammability: 0 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Wash area with strong industrial detergent and water, absorb and sweep into container for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Handling:

Do not get in eyes or on clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Solutions of this product should be mixed and stored using only stainless steel, aluminum, fiberglass, plastic or plastic-lined containers. DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Storage:

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Keep container closed to prevent spills and contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear face shield, goggles or safety glasses with front, brow and temple protection. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

		НА	AC		
Component	TWA	STEL	TWA	STEL	Unit
Glyphosate	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White solid with slight odor.

Boiling Point:

Decomposes @ 200°C

Density:

pH:

1.66 g/cc

Evaporation Rate: Freezing Point:

Not applicable Not applicable

2.14 (1% solution)

Solubility in Water:

Specific Gravity: Vapor Density:

Not determined Not applicable

Soluble

Vapor Pressure: Viscosity:

Not applicable Not applicable

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Strong oxidizing agents: bases and acids. This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Hazardous Decomposition Products: Under fire conditions, may produce gases such as oxides of

carbon, nitrogen, and phosphorous.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological Data for Glyphosate Technical

Data from laboratory studies conducted on a similar, but not identical, formulation:

Oral: Rat LD₅₀: >5,000 mg/kg

Dermal: Rabbit LD₅₀: >5,000 mg/kg

Eye Irritation: Rabbit: Moderately to severely irritating.

Skin Irritation: Rabbit: Non-irritating

Subchronic (Target Organ) Effects: Repeated overexposure to glyphosate may decrease body weight

gains and effects to liver.

Carcinogenicity / Chronic Health Effects: Prolonged overexposure to glyphosate may cause effects to the liver. There was no evidence of carcinogenicity in animal studies using glyphosate. EPA has given glyphosate a Group E classification (evidence of non-carcinogenicity in humans).

Reproductive Toxicity: In laboratory animal studies with glyphosate, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Developmental Toxicity: In animal studies, glyphosate did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother.

Genotoxicity: Glyphosate has produced no genetic changes in a variety of standard in vitro (bacterial cells) and in vivo tests using animals.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Data on Glyphosate Technical:

96-hour LC₅₀ Bluegill:

120 mg/l

Bobwhite Quail 8-day Dietary LC₅₀:

>4,500 ppm

96-hour LC₅₀ Rainbow Trout:

86 mg/l

Mallard Duck 8-day Dietary LC₅₀:

>4,500 ppm

48-hour LC₅₀ Daphnia:

780 mg/l

Environmental Fate:

In the environment glyphosate adsorbs strongly to soil and is expected to be immobile in soil. Glyphosate is readily degraded by soil microbes to AMPA (aminomethyl phosphonic acid) that is further degraded to carbon dioxide. Glyphosate and AMPA are unlikely to enter ground water due to their strong adsorptive characteristics. Terrestrially-applied glyphosate has the potential to move into surface waters through soil erosion because it may be adsorbed to soil particles suspended in the runoff. Aquatic applications registered for certain formulations may also result in glyphosate entering surface waters. Complete degradation is slow, but dissipation in water is rapid because glyphosate is bound in sediments and has low biological availability to aquatic organisms. These characteristics suggest a low potential for bioconcentration in aquatic organisms and this has been verified by laboratory investigations of glyphosate bioconcentration in numerous marine and freshwater organisms with and without soil. The maximum whole body bioconcentration factors for fish were observed to be less than 1X. Bioconcentration factors for sediment dwelling mollusks and crayfish tended to be slightly higher, but were always less than 10X. In addition, any residues accumulated in organisms were rapidly eliminated.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with application Federal, state or local procedures.

Container Handling and Disposal:

Nonrefillable Containers Without Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke.

Nonrefillable Containers With Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke. Offer the outer bag for recycling, if available.

Refillable Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with pump 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. An empty container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Completely empty package into formulation equipment. This package may be returned for refilling with this product. If not refilled, dispose of empty package in a sanitary landfill or by incineration as applicable.

14. TRANSPORTATION INFORMATION

DOT: Not Regulated

IMDG: Not Regulated

IATA: Not Regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370): Immediate

Section 313 Toxic Chemical(s): None

Reportable Quantity (RQ) under U.S. CERCLA: None

RCRA Waste Code: None

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not listed

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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